

FIG. 1

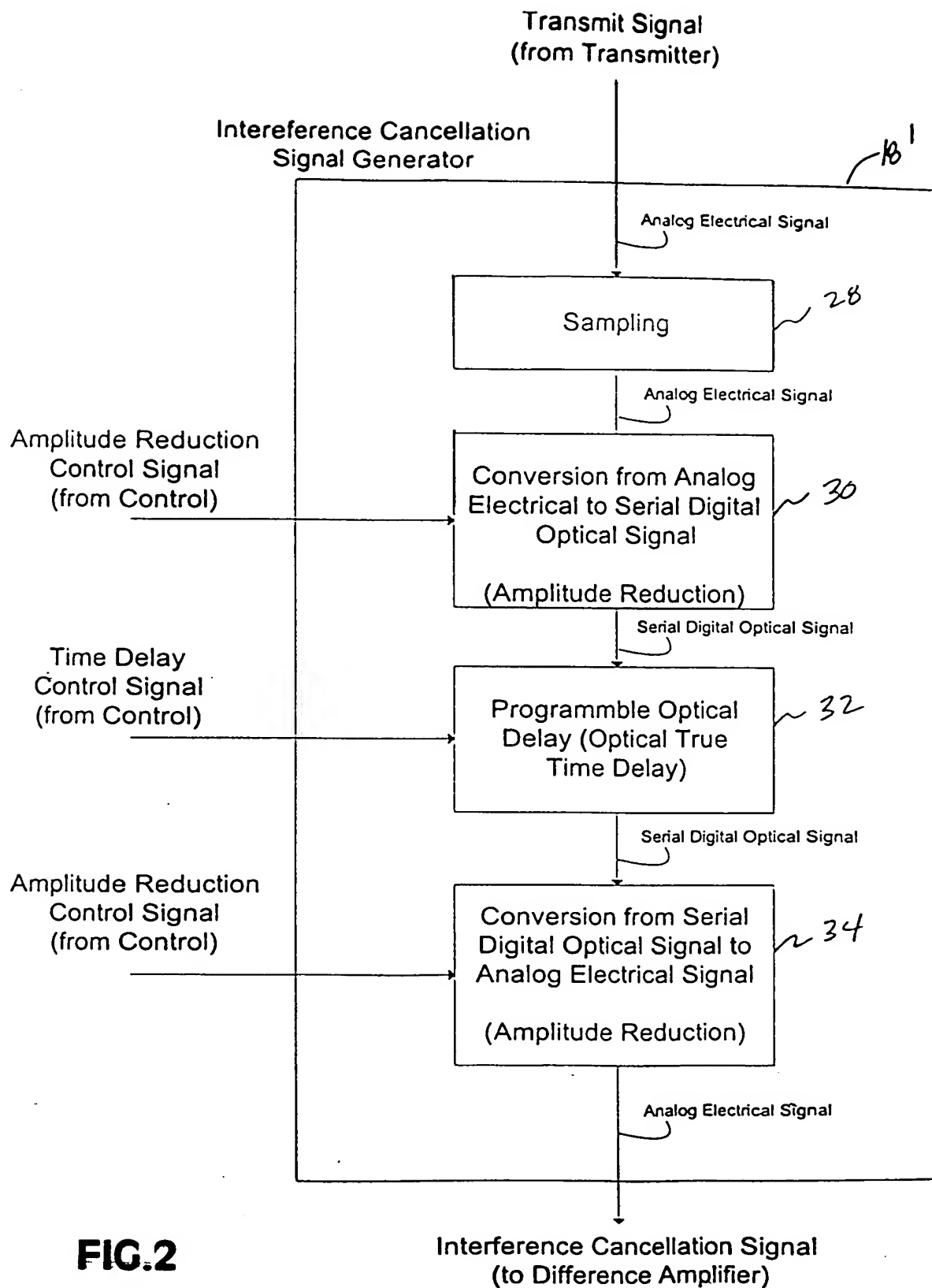


FIG.2

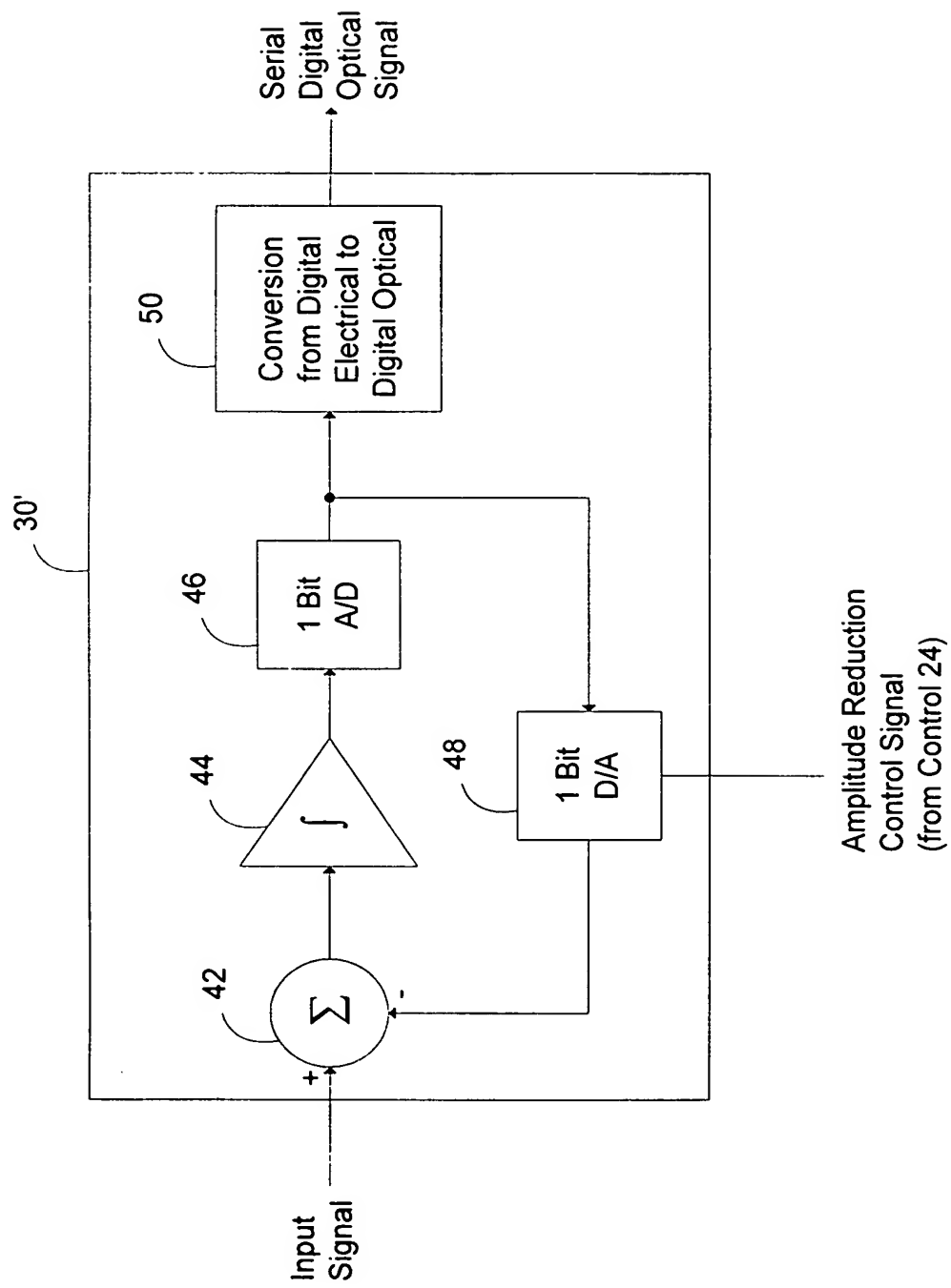


FIG. 3A

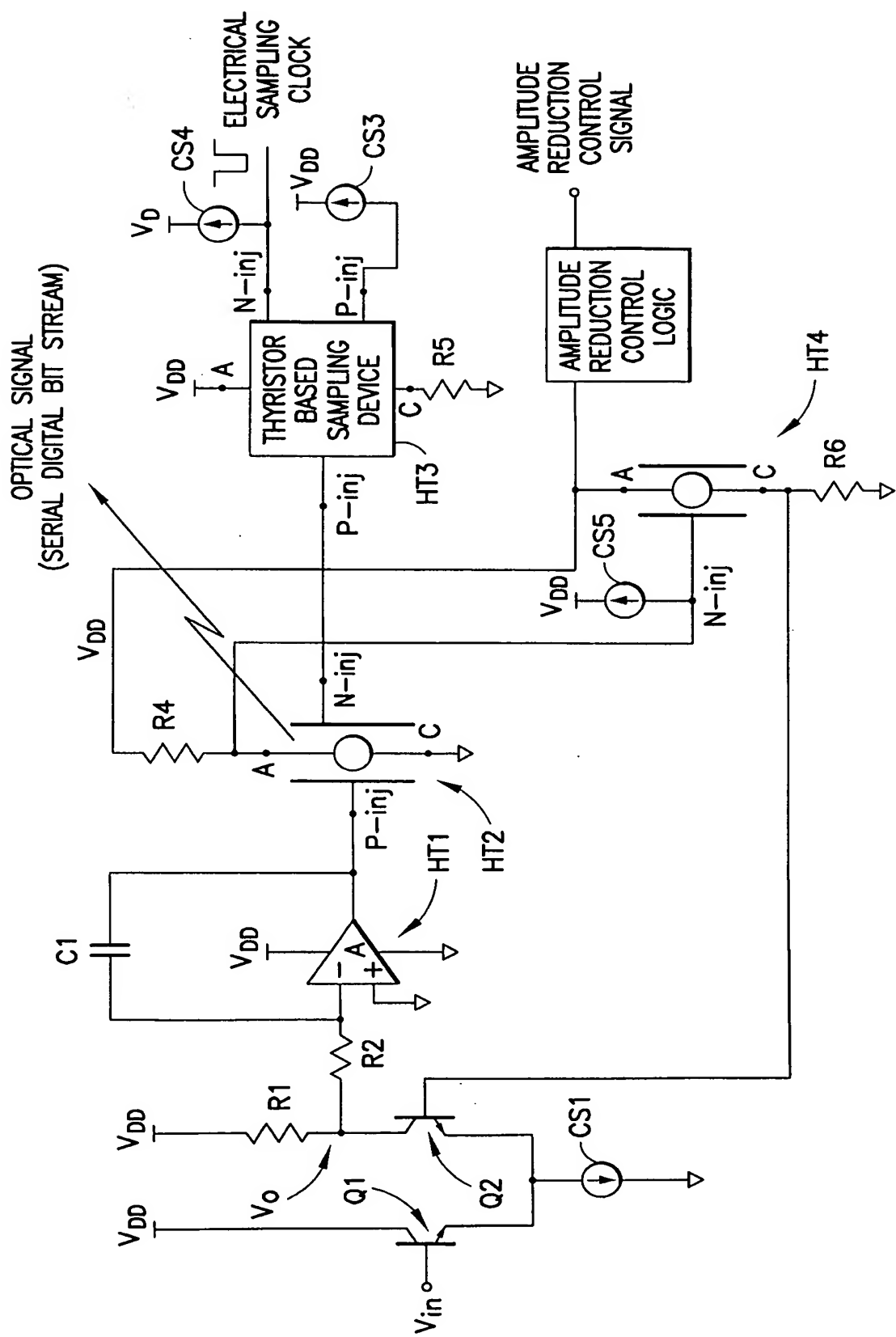
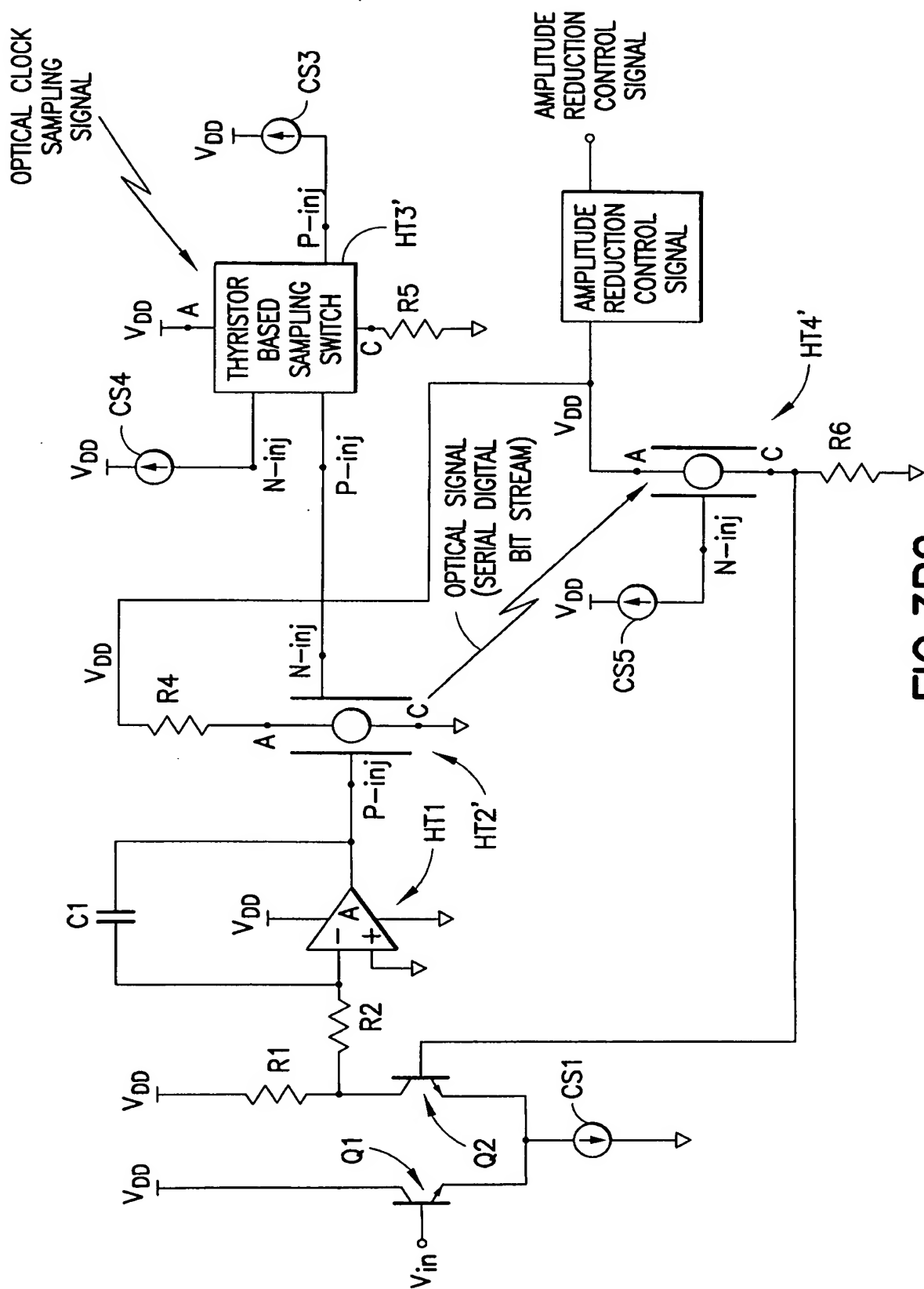


FIG. 3B1



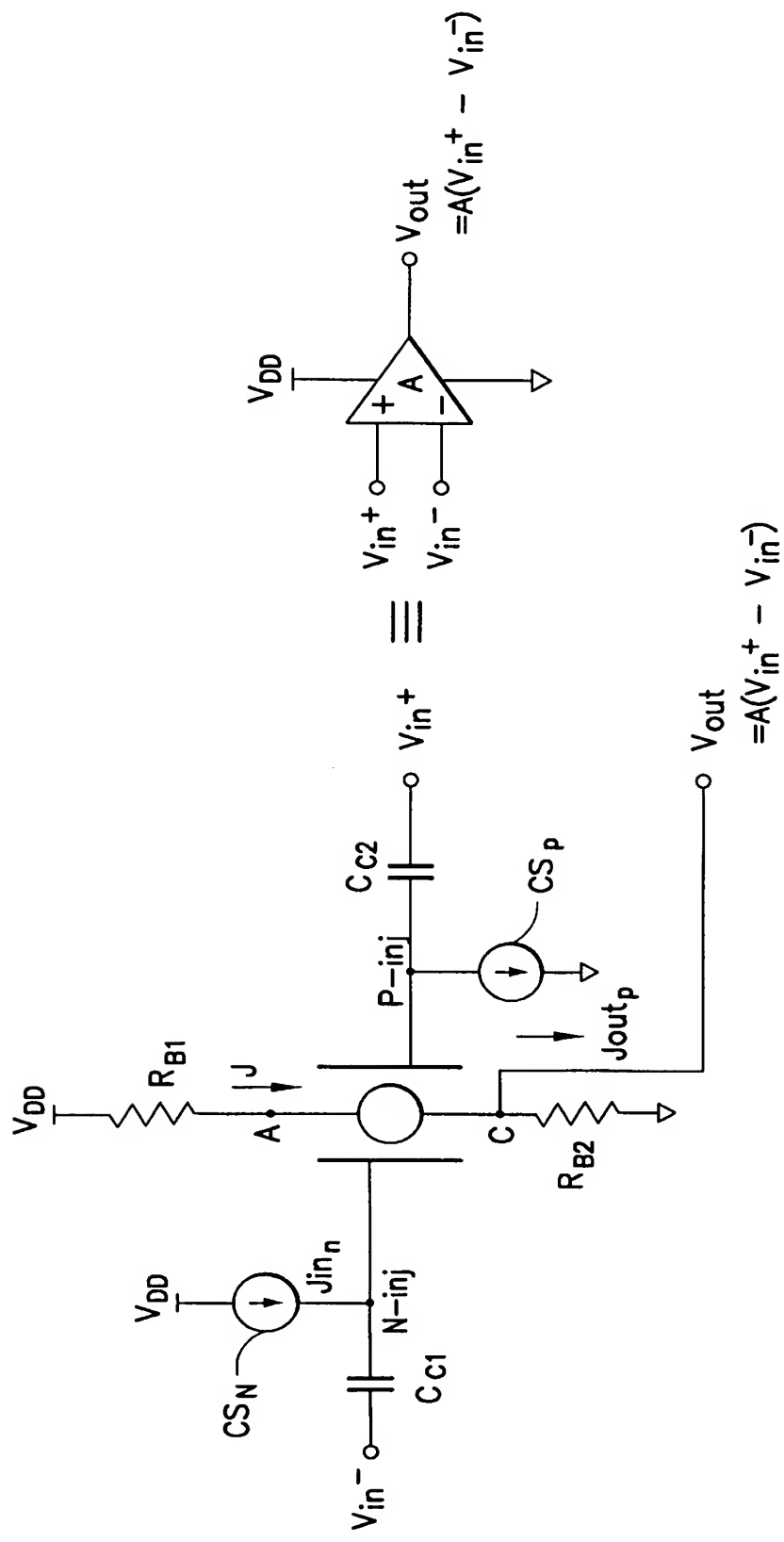


FIG.3C1

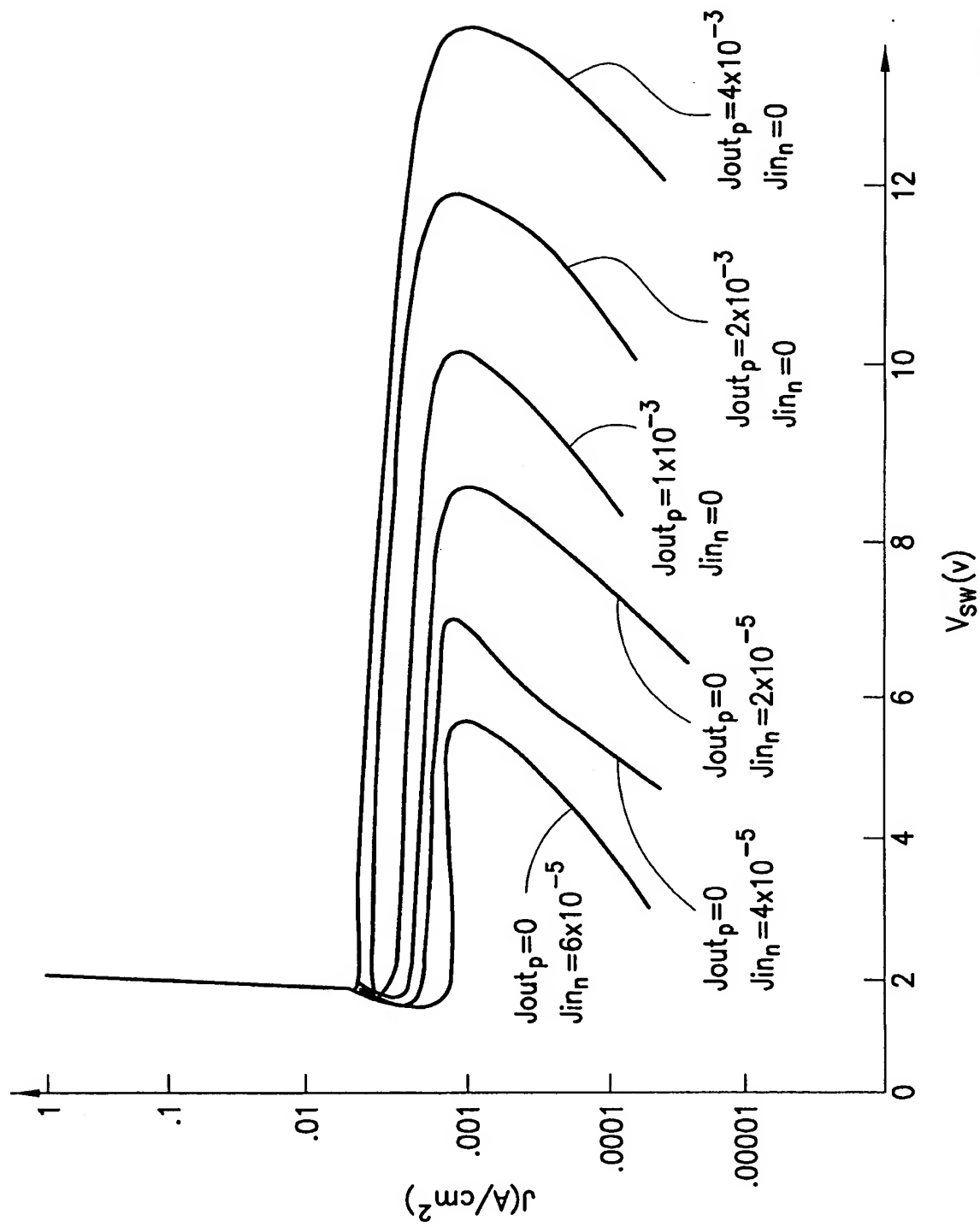


FIG.3C2

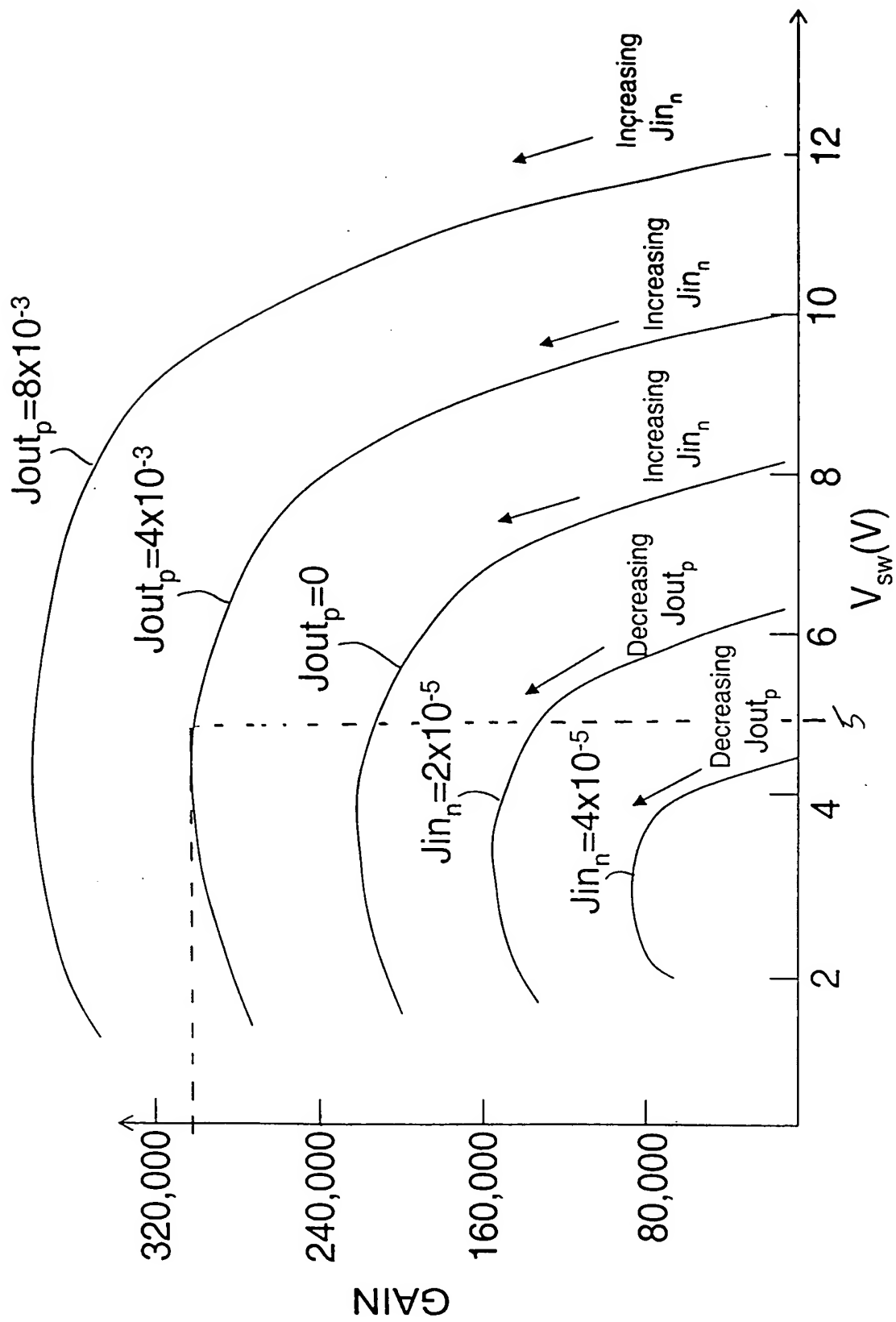


FIG.3C3

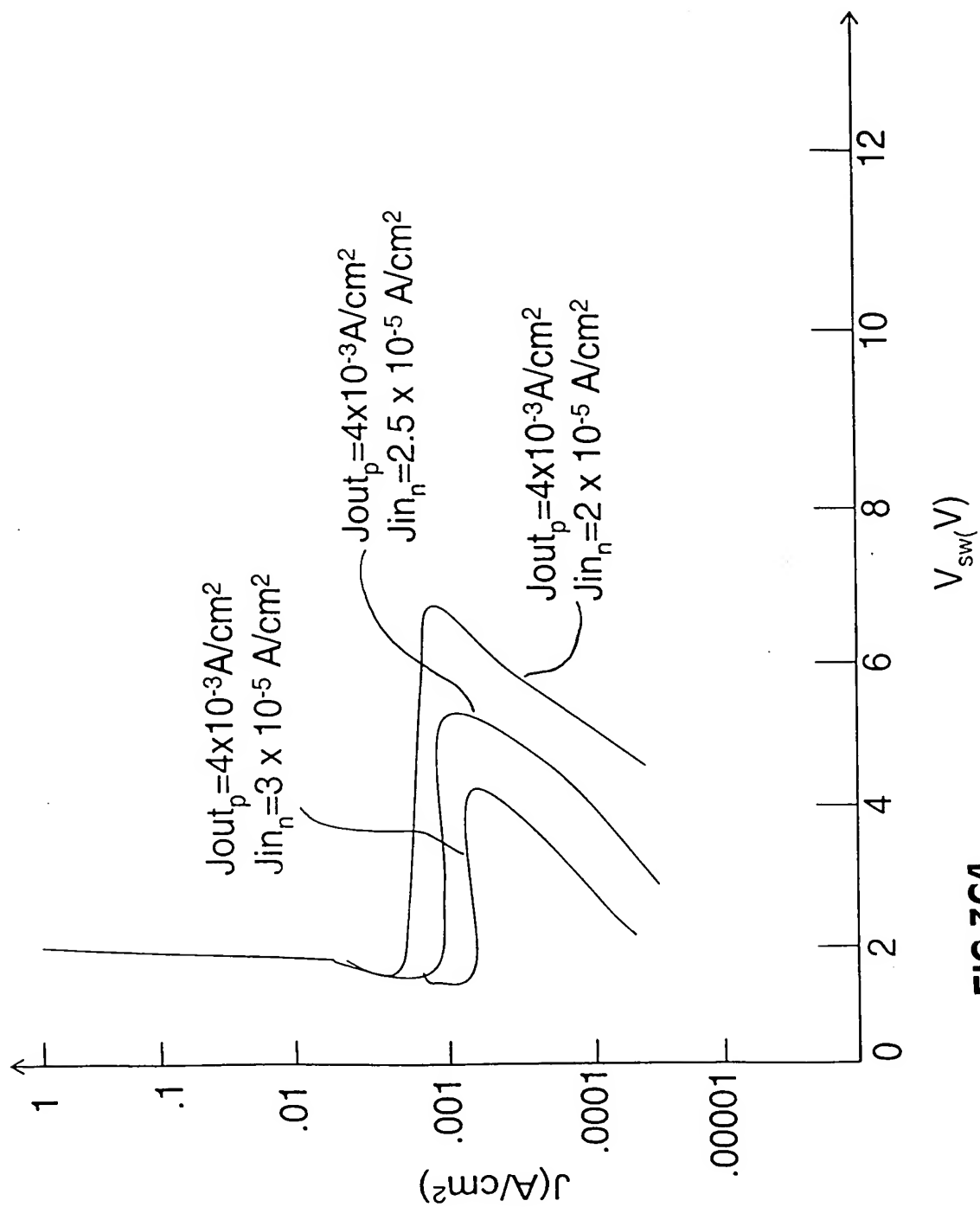


FIG.3C4

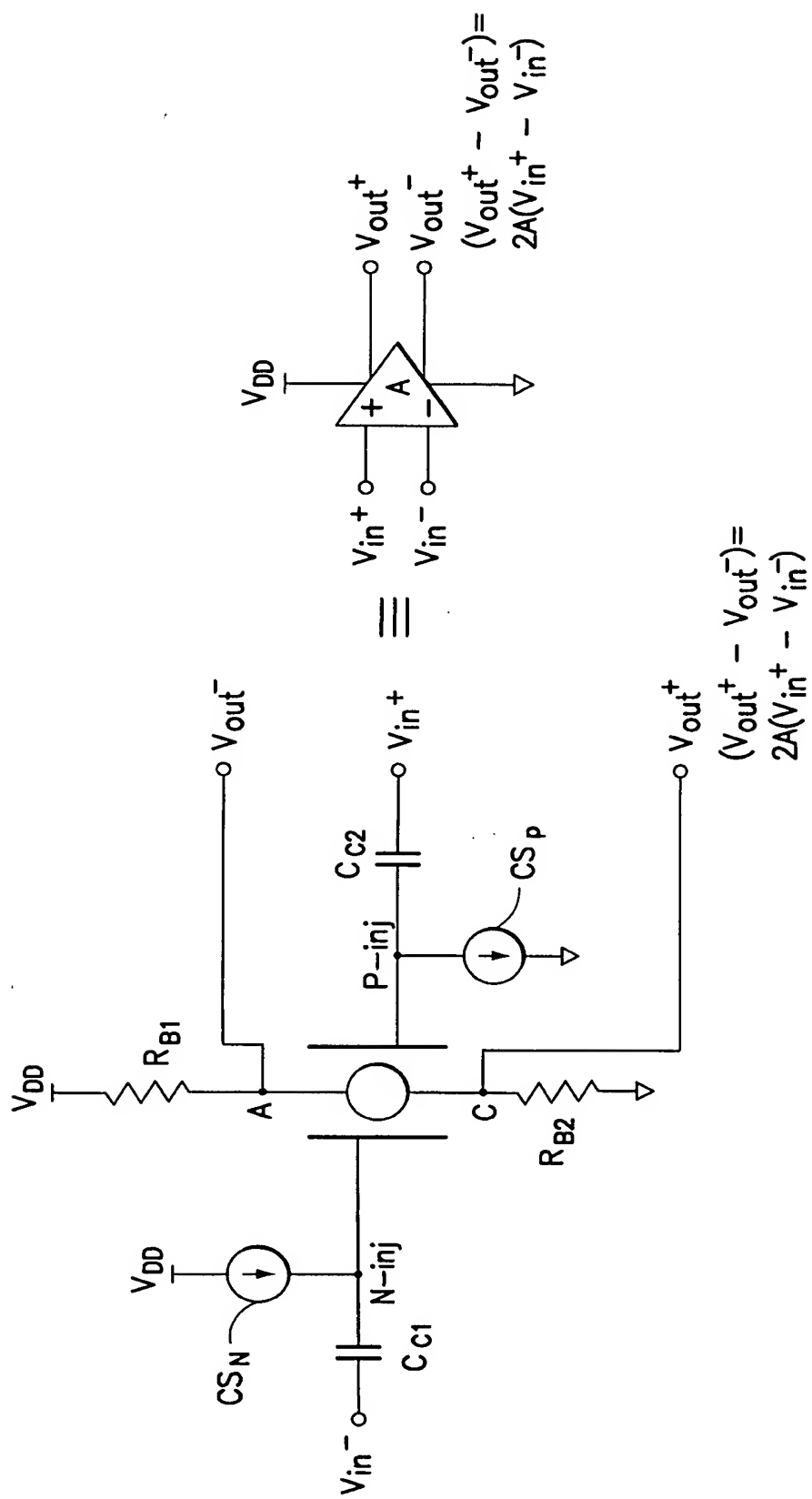
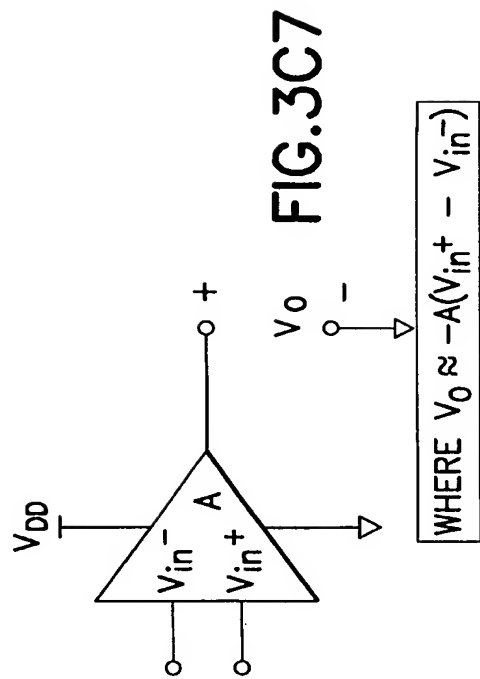
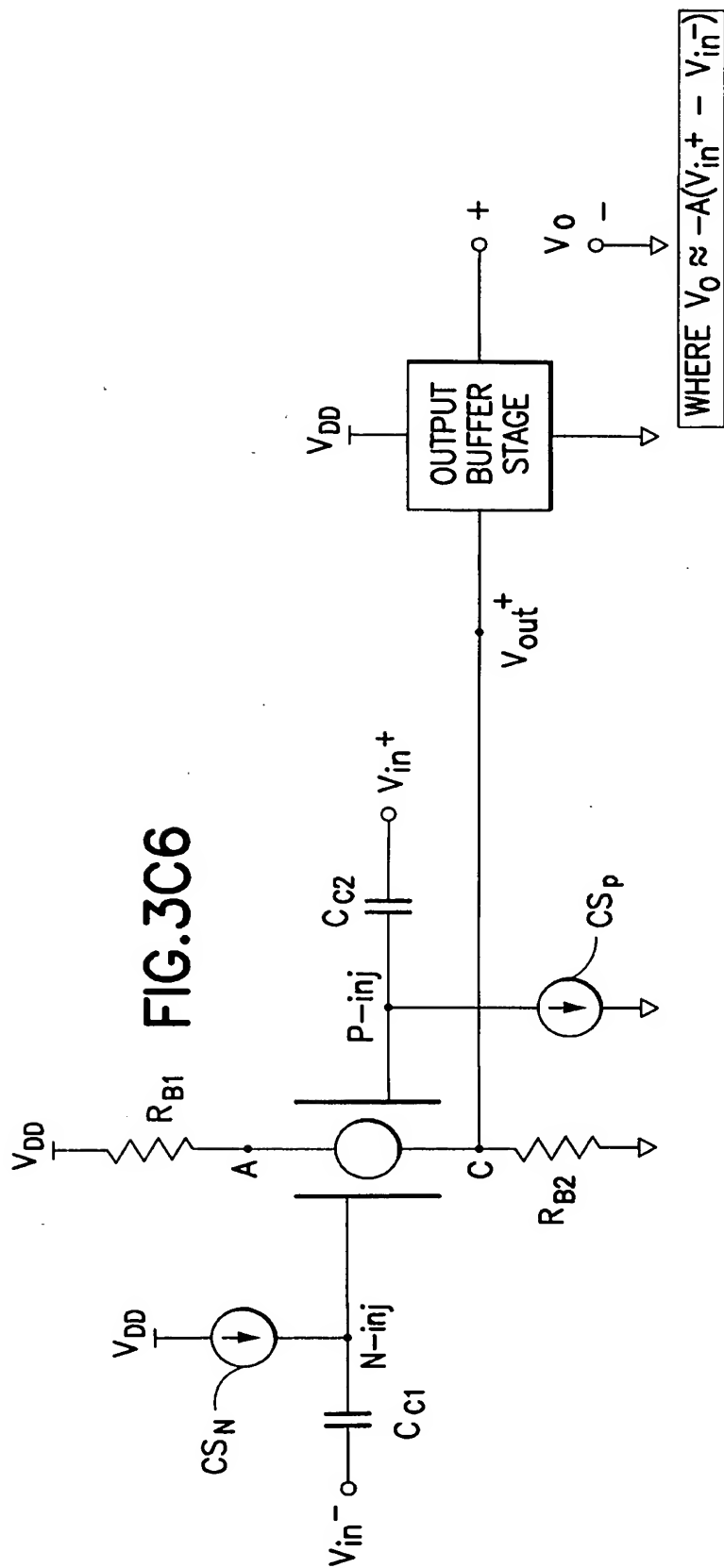


FIG.3C5



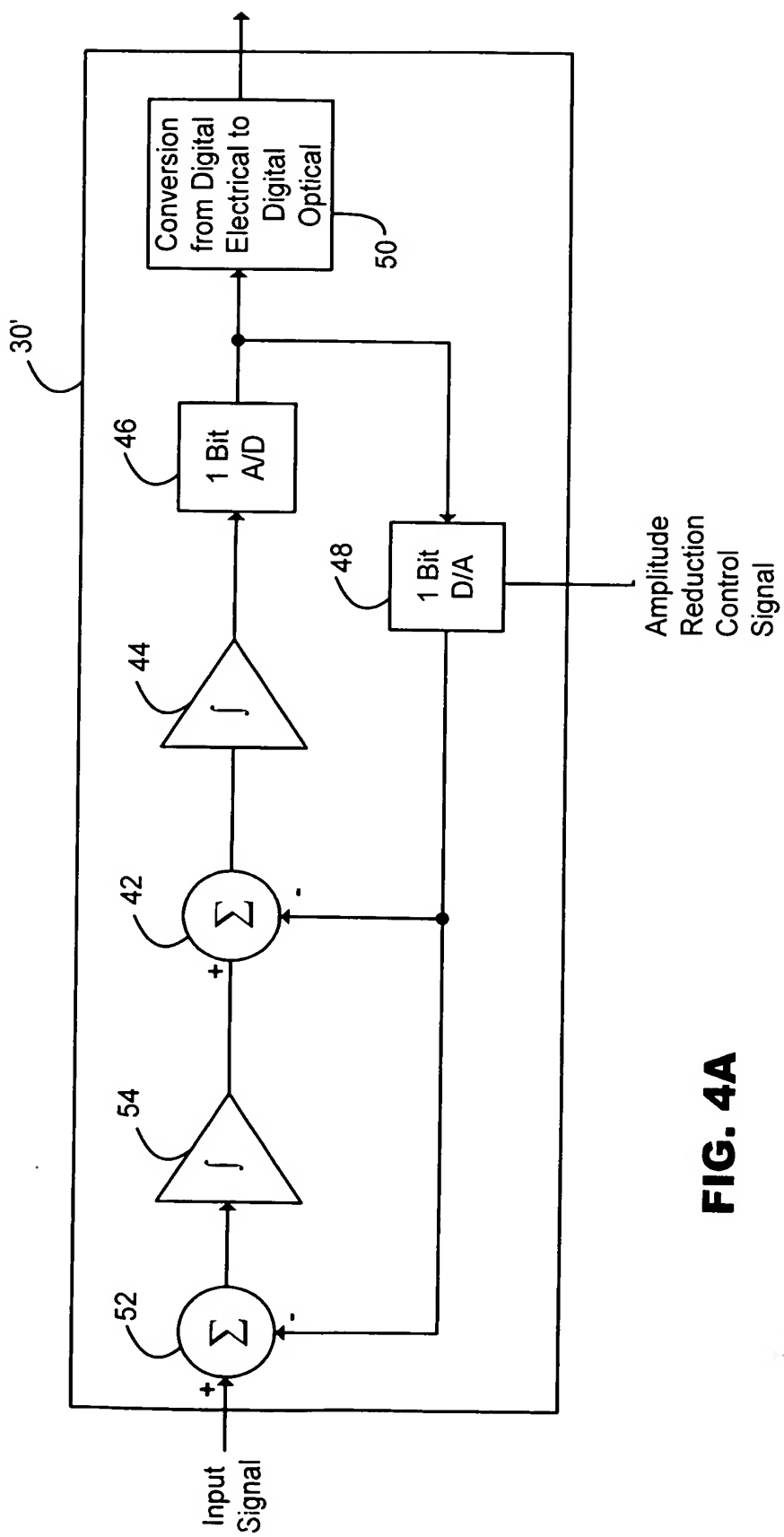


FIG. 4A

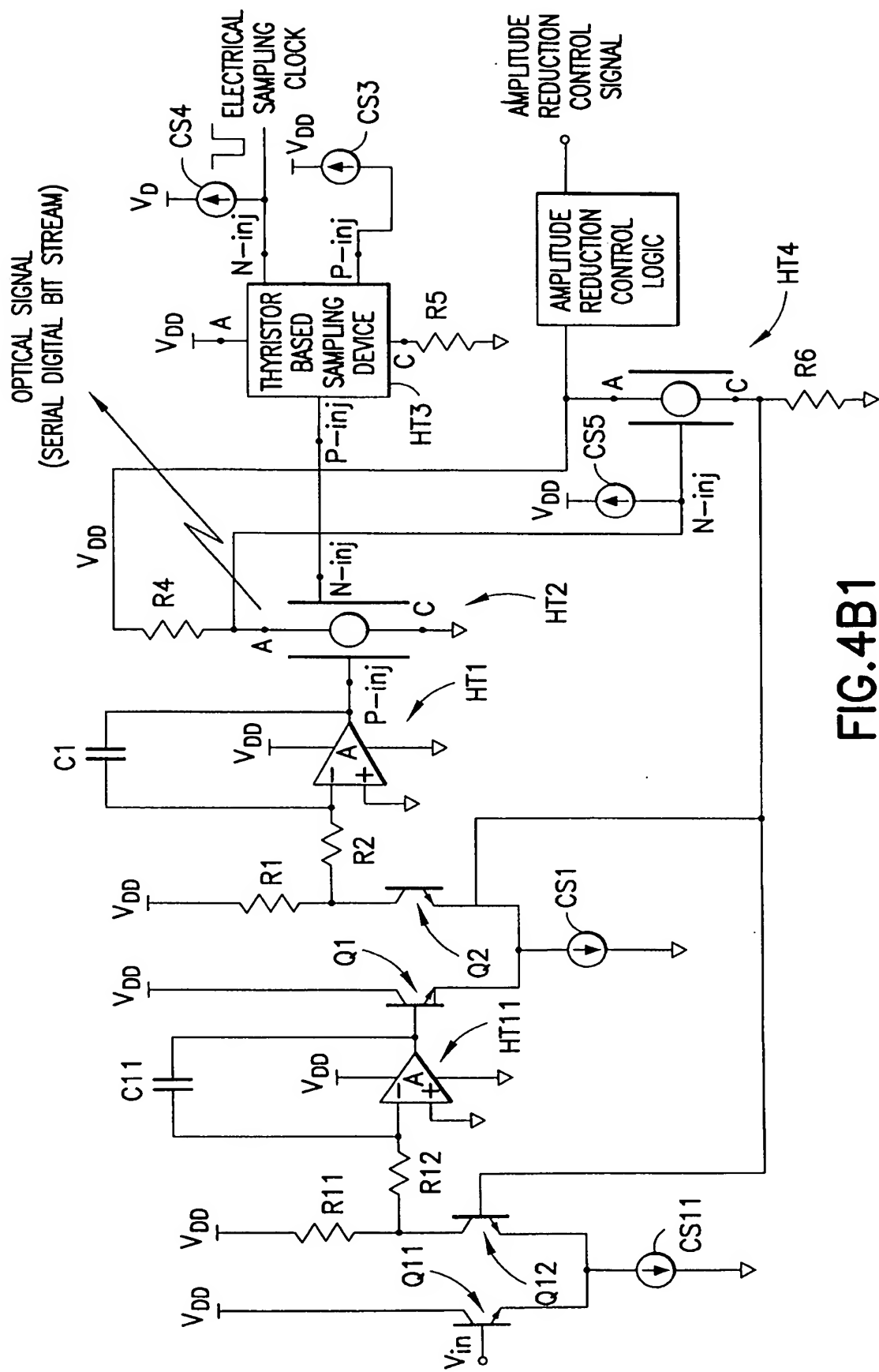


FIG.4B1

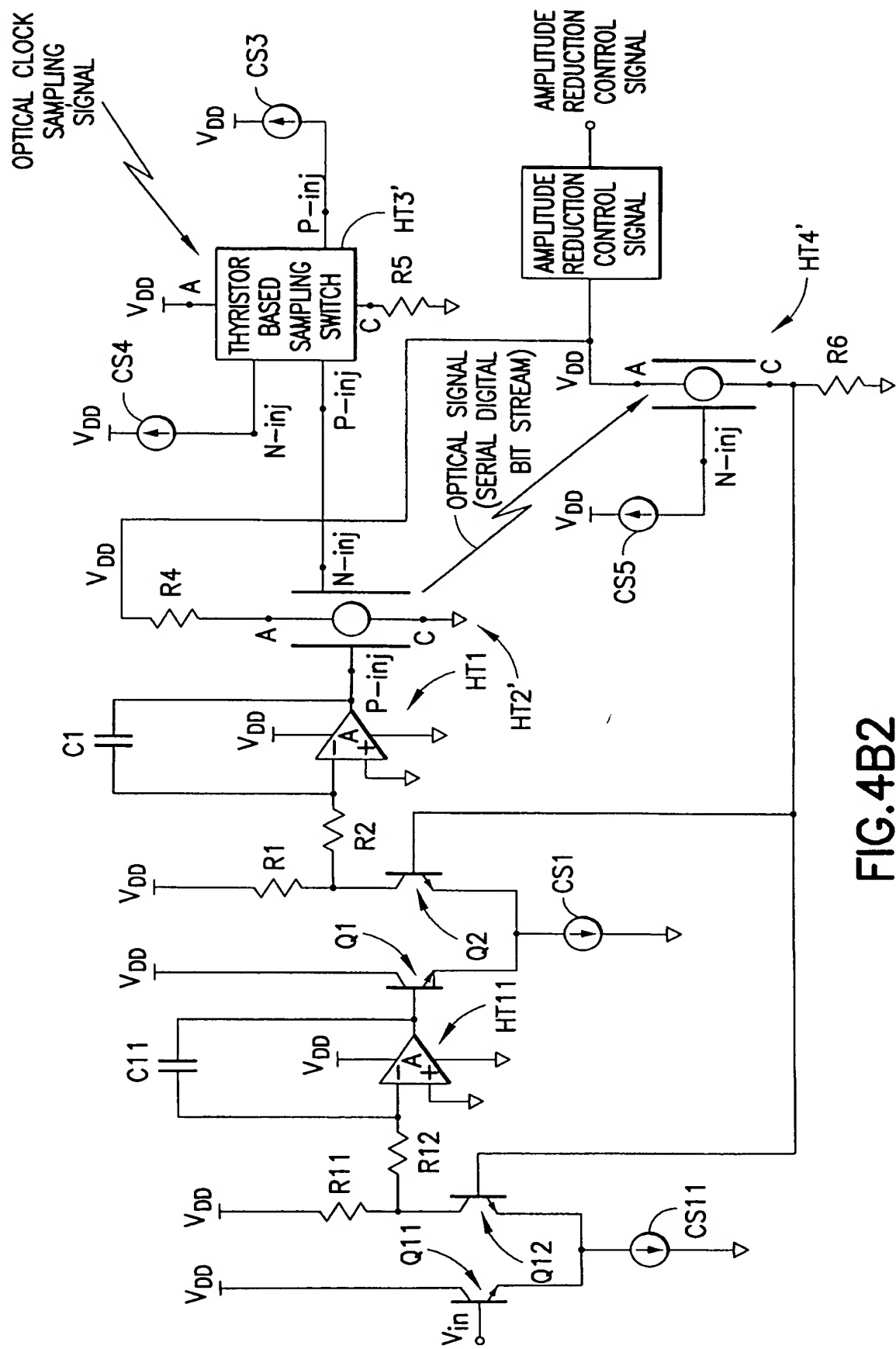


FIG.4B2

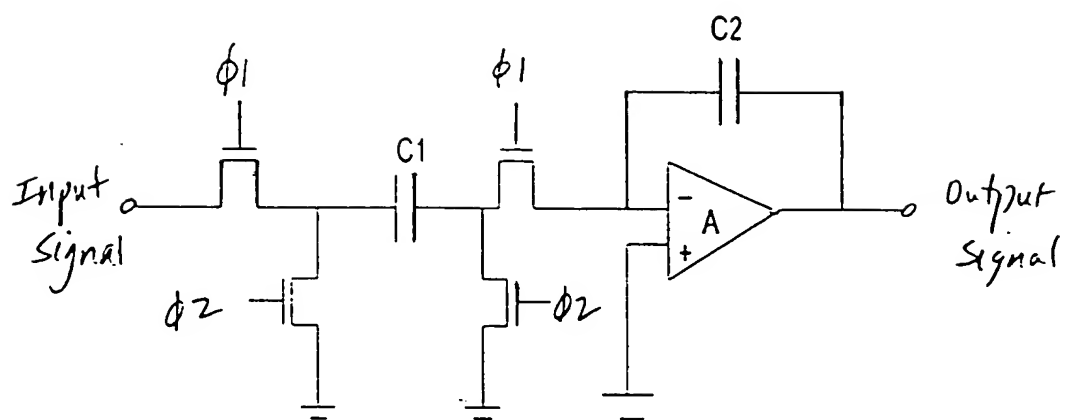


FIG.4B3

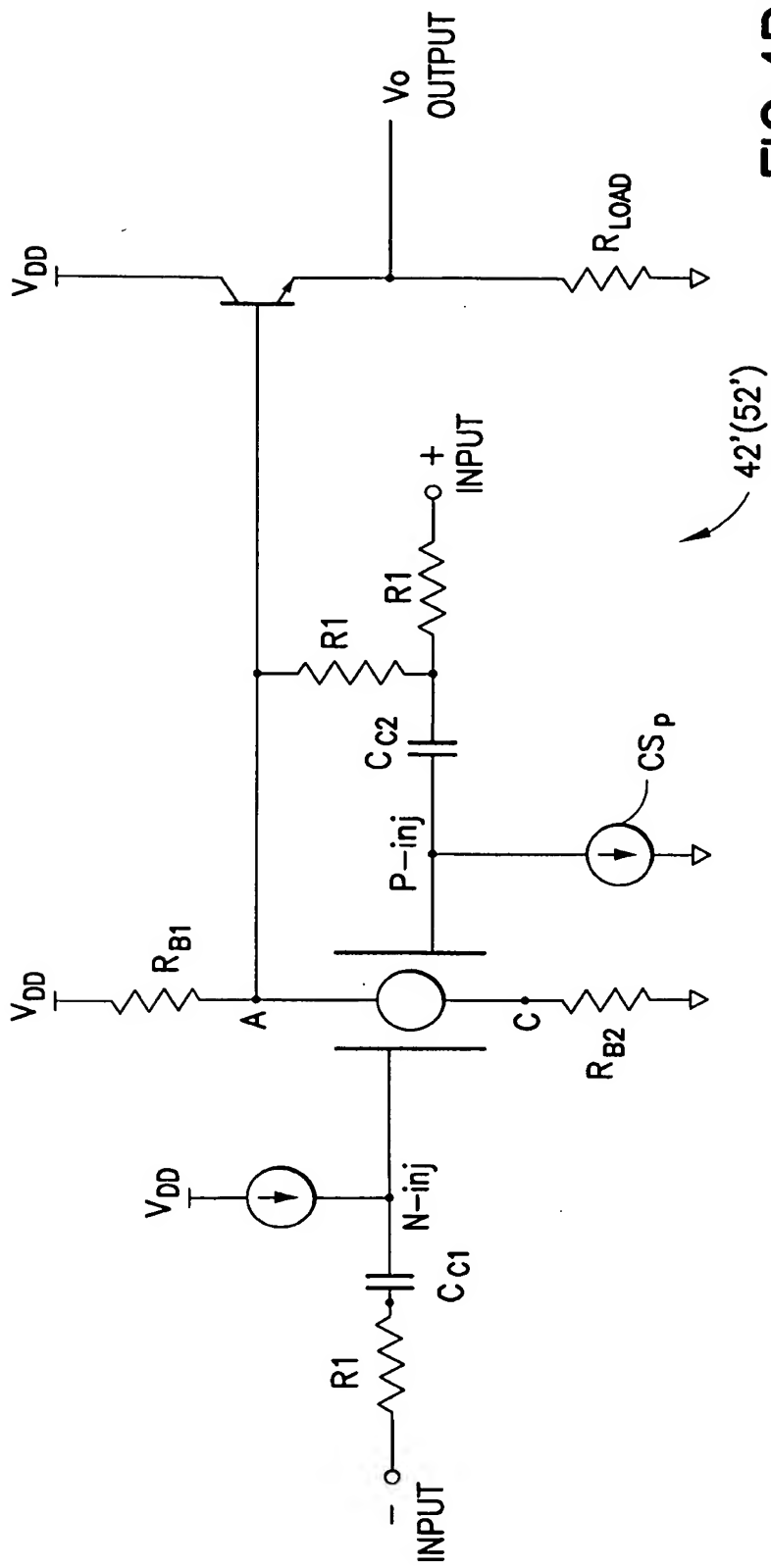


FIG. 4B4

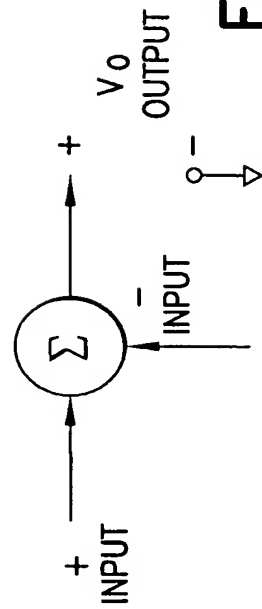


FIG. 4B5

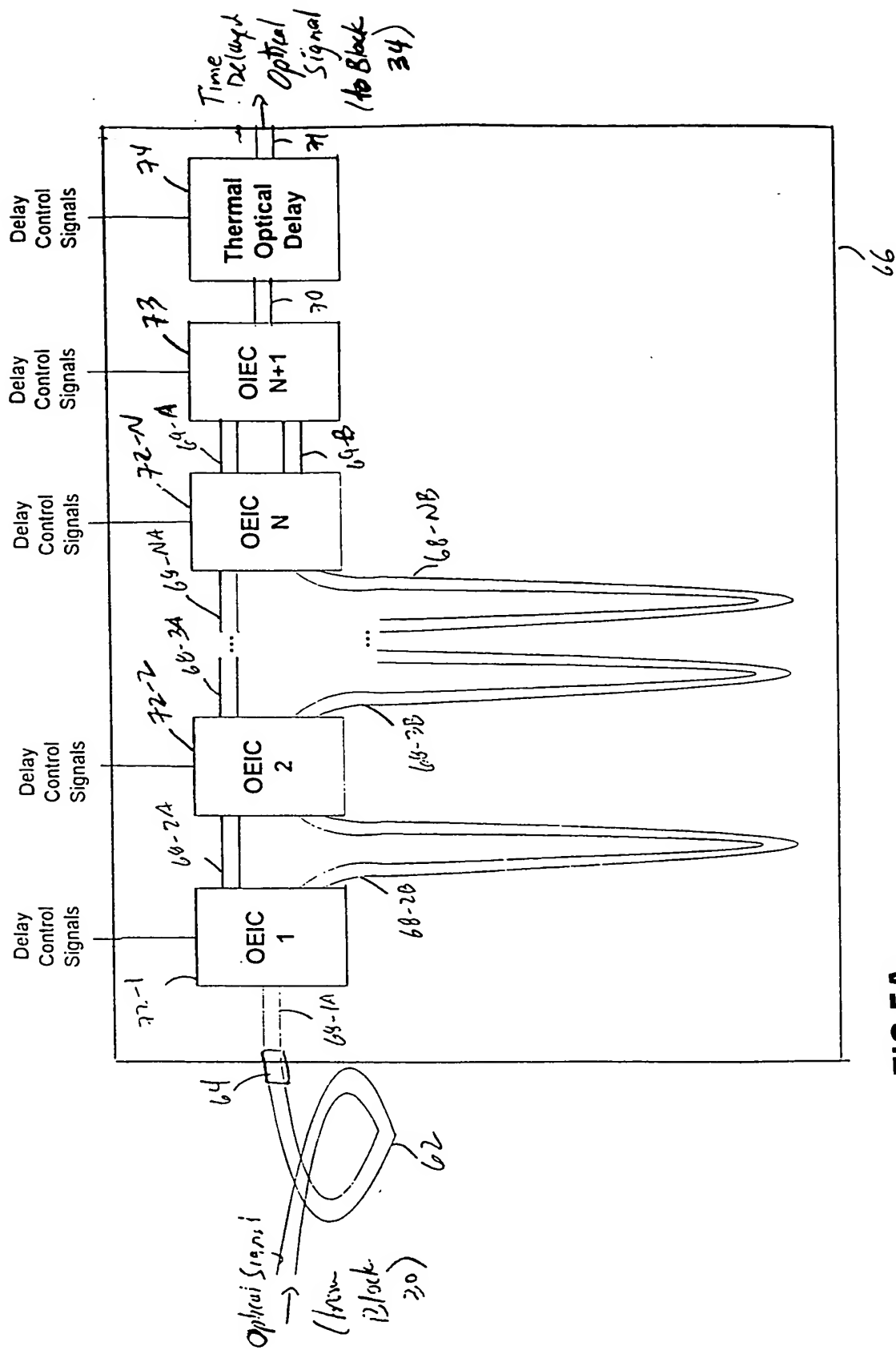


FIG. 5A

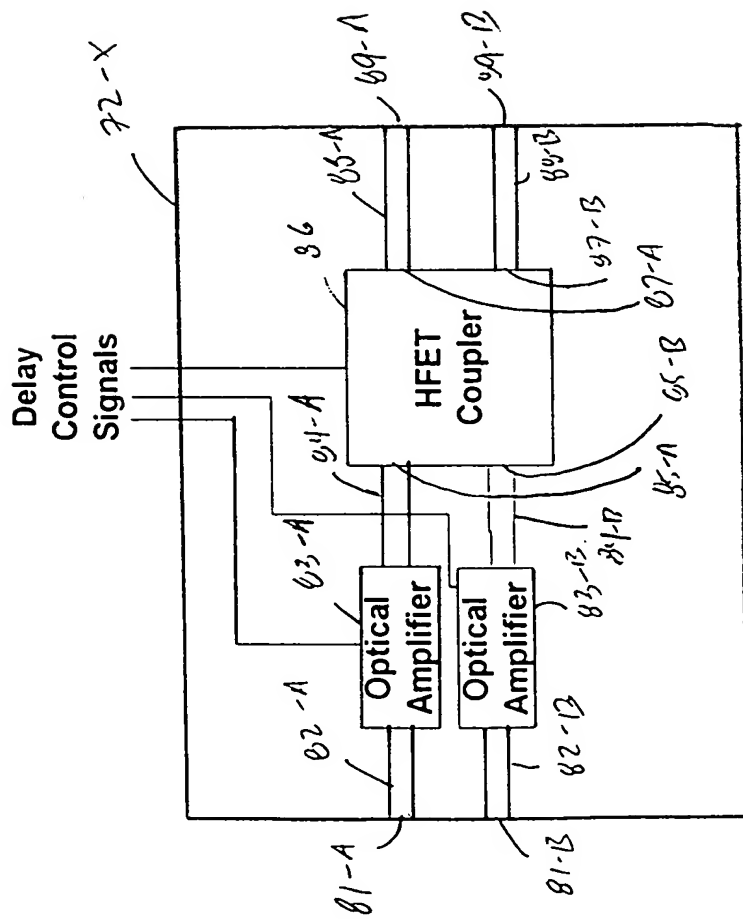
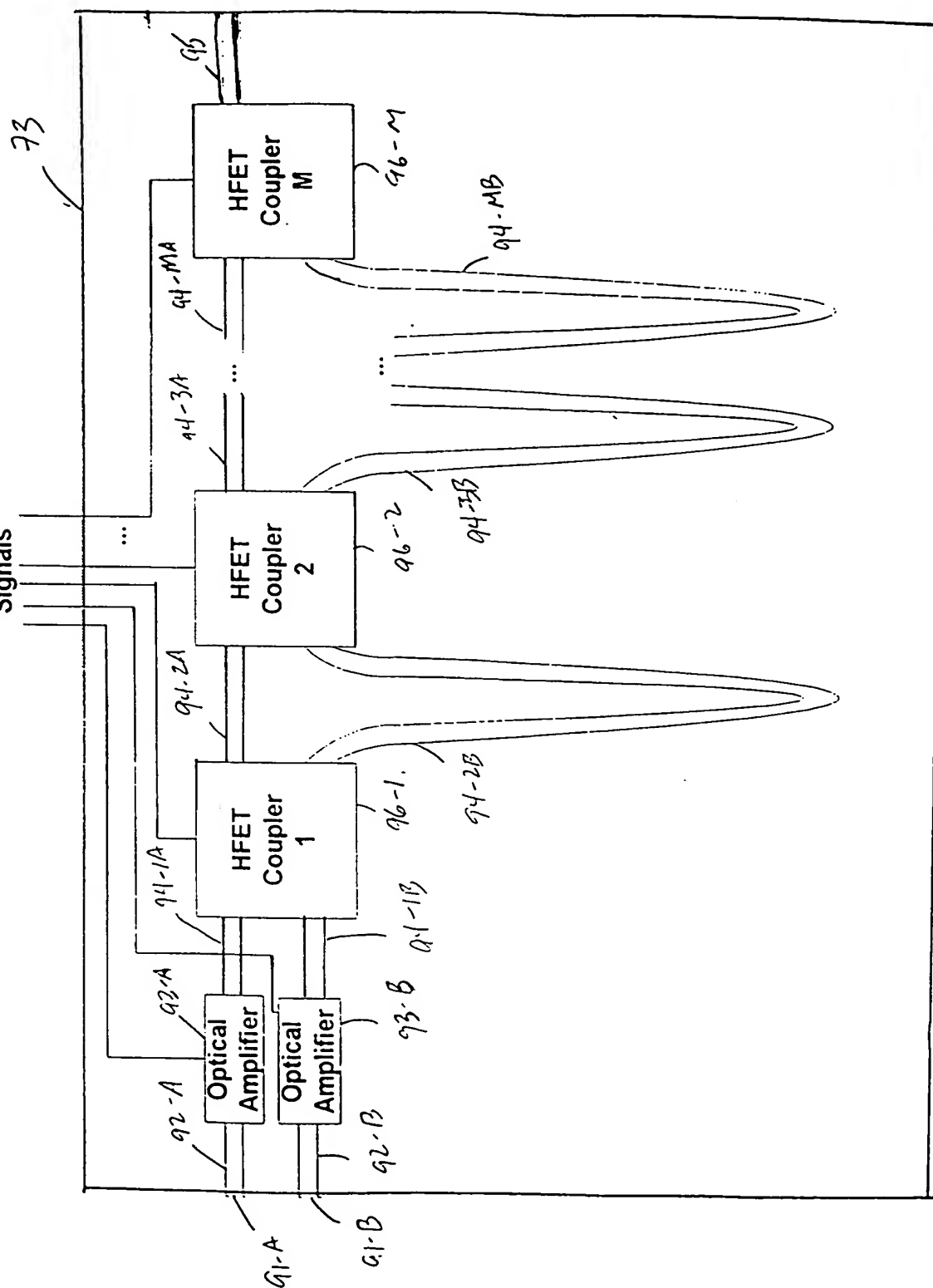


FIG. 5B1

Delay Control Signals



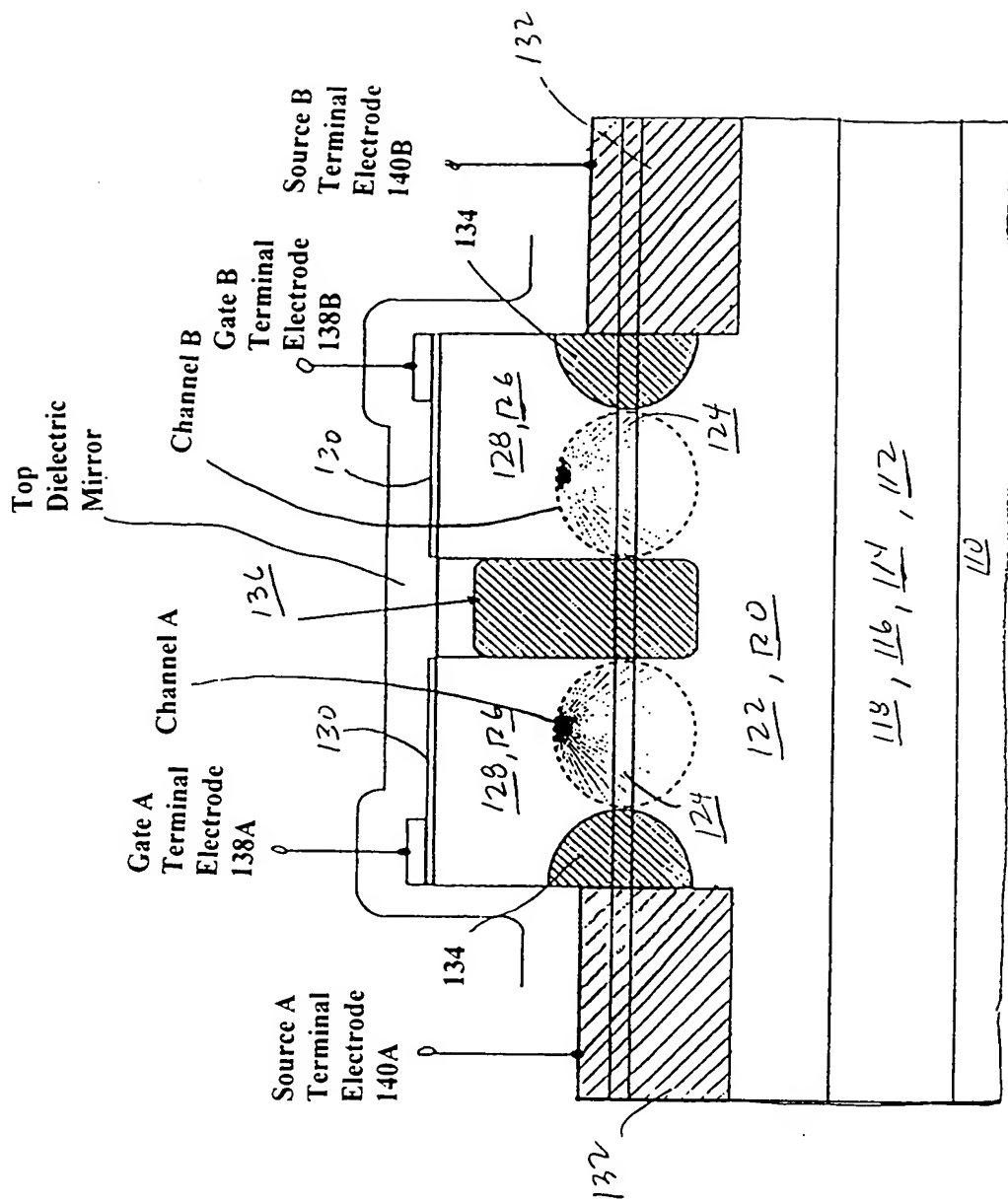


FIG. 5C1

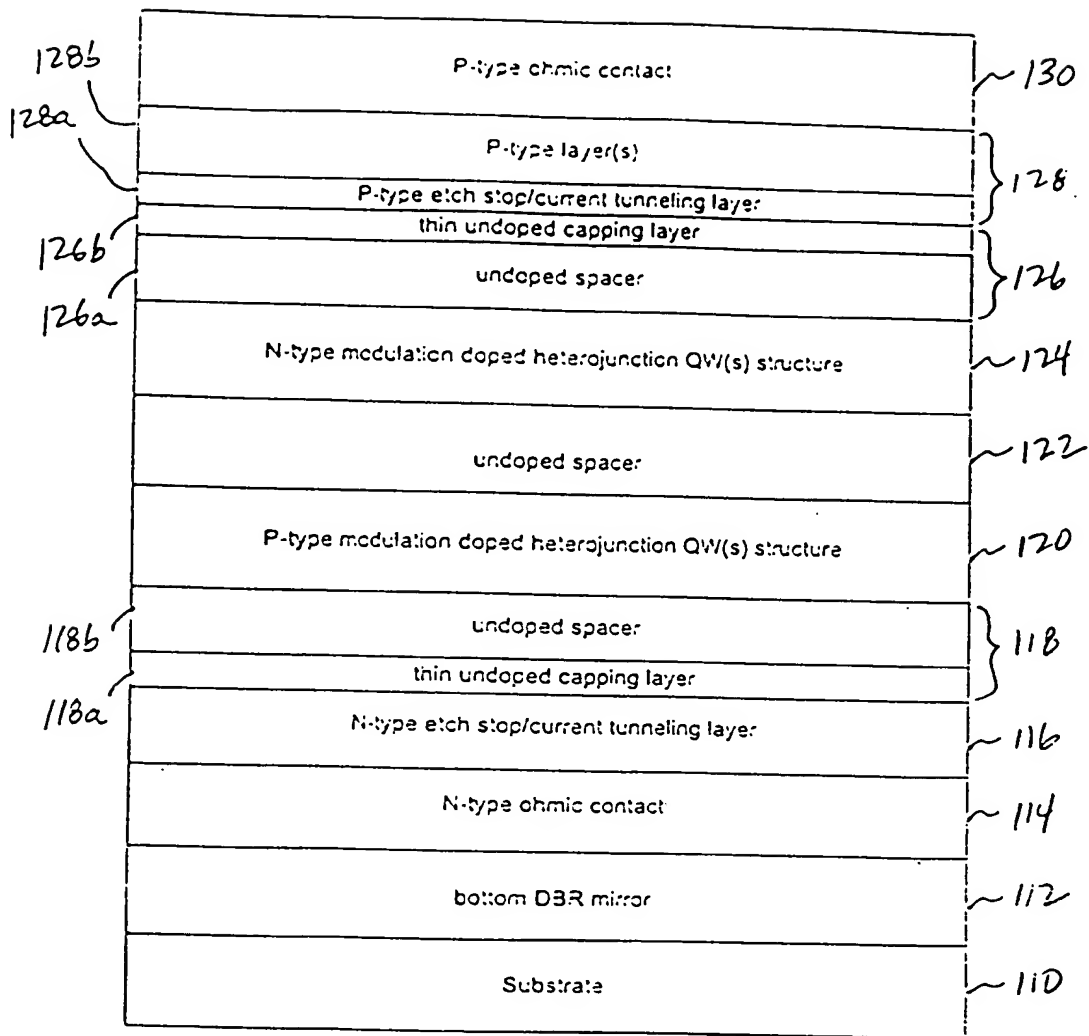


FIG.5C2

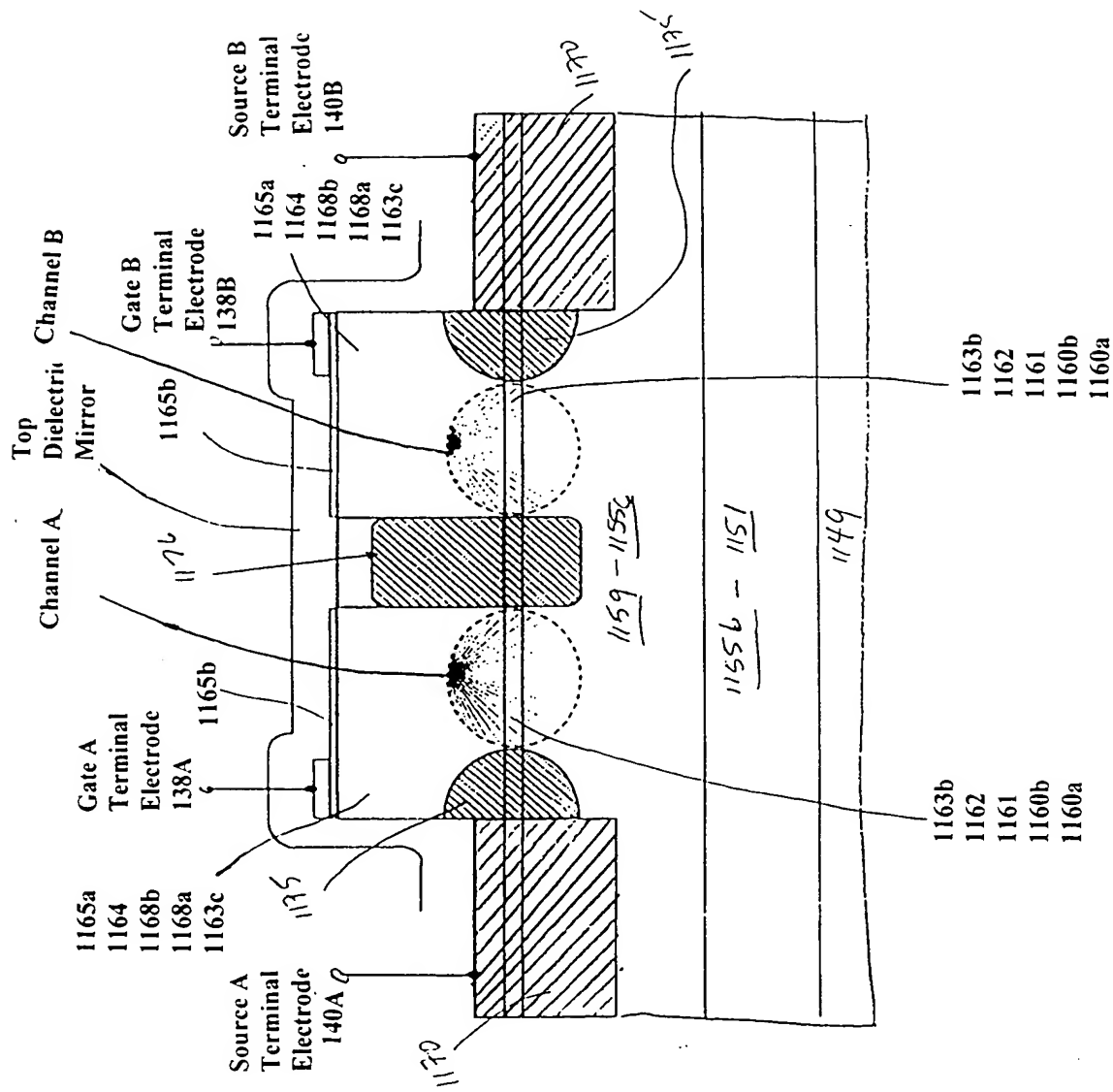
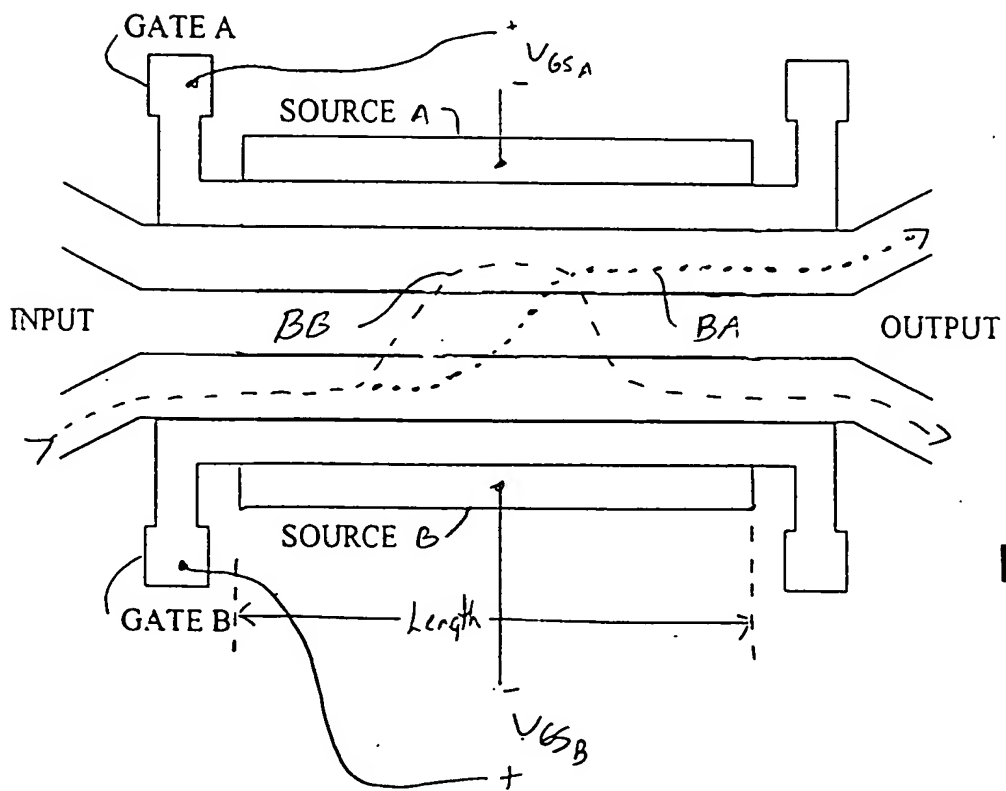
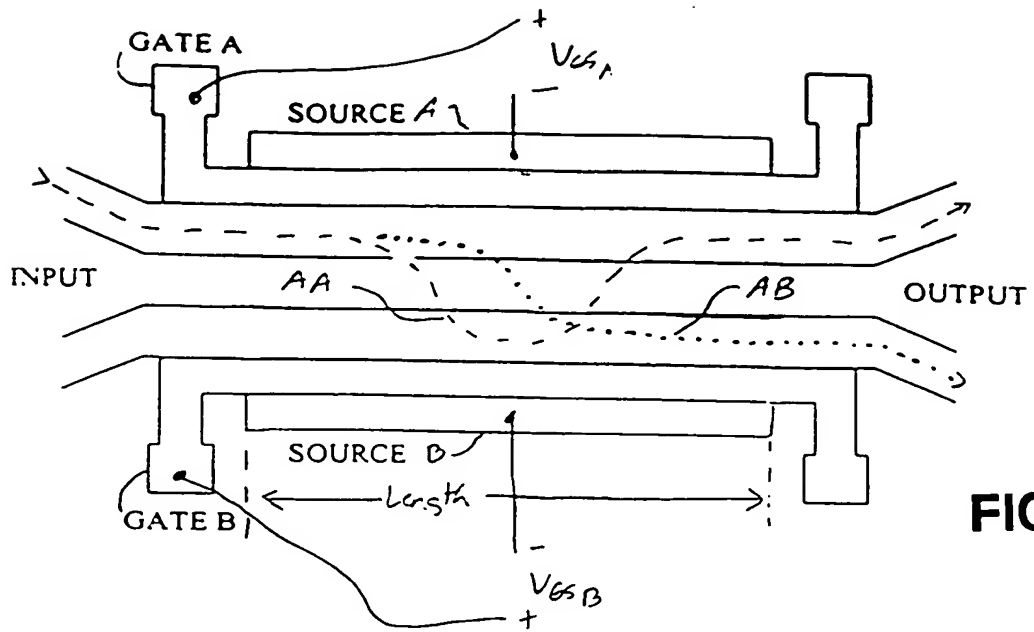


FIG. 5D1

Layer Material	Layer Doping Type	Typical Doping Concentration (atoms/cm ³)	Typical Layer Thickness (Å)	Layer #
InGaAs	p+	1E20	25	1165b
GaAs	p+	1E20	75	1165a
GaAs	c	1.5E17	300	1164
AlAs	p+	3.5E18	>20, <300	1168b
GaAs	und	und	>6, <20	1168a
Al.15Ga.85As	und	und	200 - 300	1163c
Al.15Ga.85As	n+	3.5E18	80	1163b
Al.15Ga.85As	und	und	20-30	1163a
GaAs	und	und	15	1162
In.15Ga.85AsN } x3	und	und	60	1161
GaAs	und	und	100	1160b
Al.15Ga.85As	und	und	100 - 250	1160a
GaAs	und	und	5000	1159
GaAs	und	und	250 - 500	1167
In.15Ga.85AsN } x3	und	und	100	1158
GaAs	und	und	60	1157
Al.15Ga.85As	und	und	15	1156
Al.15Ga.85As	und	und	30	1155d
Al.15Ga.85As	p+	3.5E18	80	1155c
Al.15Ga.85As	und	und	200-300	1155b
GaAs	und	und	>6, <20	1166b
AlAs	n+	3.5E18	>30, <200	1166a
GaAs	n+	3.5E18	1000 - 2000	1153
AlAs	und	und	1701	1151
GaAs } x7	und	und	696	1152
AlAs	und	und	1701	1151
GaAs Substrate		Si		1149

FIG.5D2



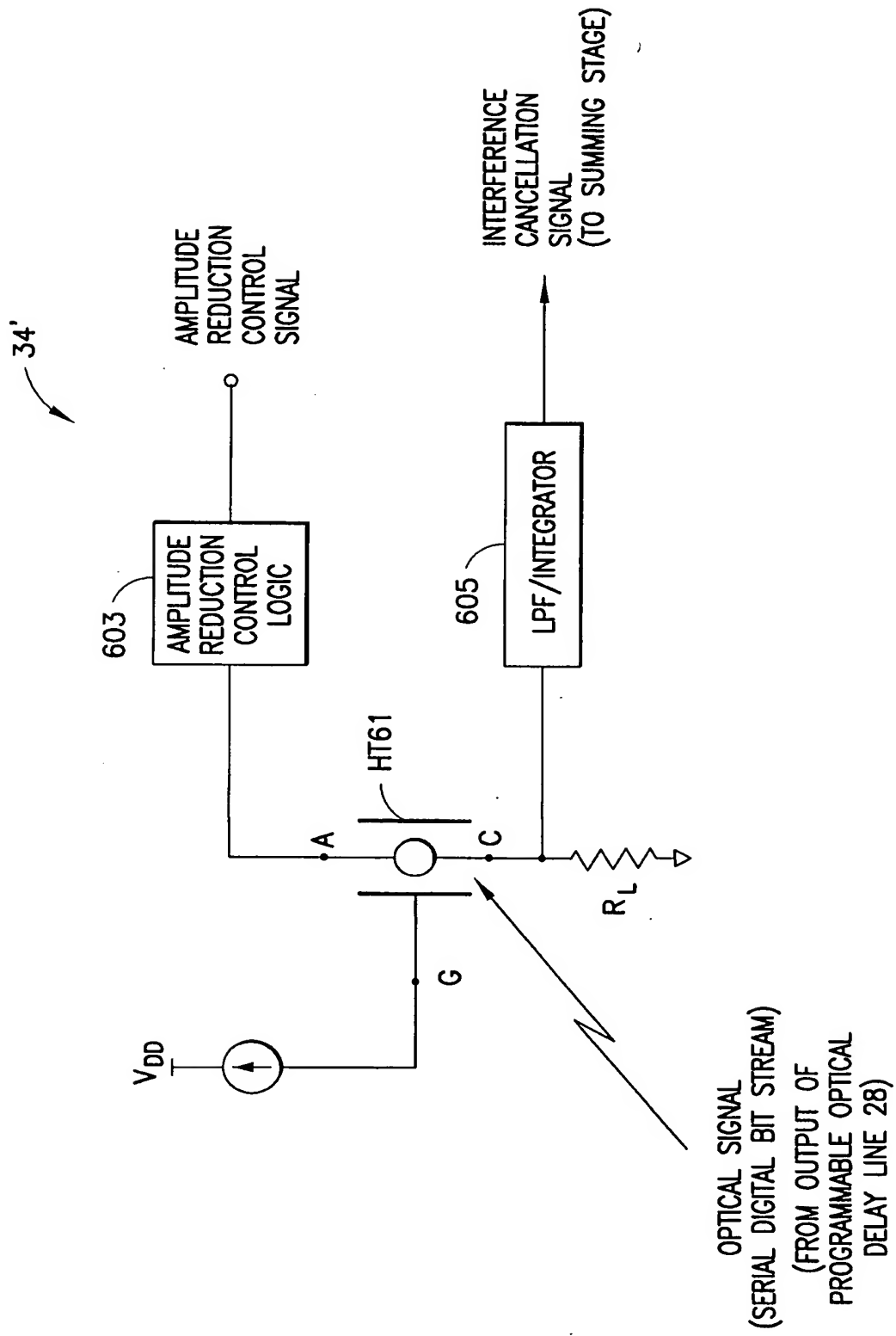


FIG.6

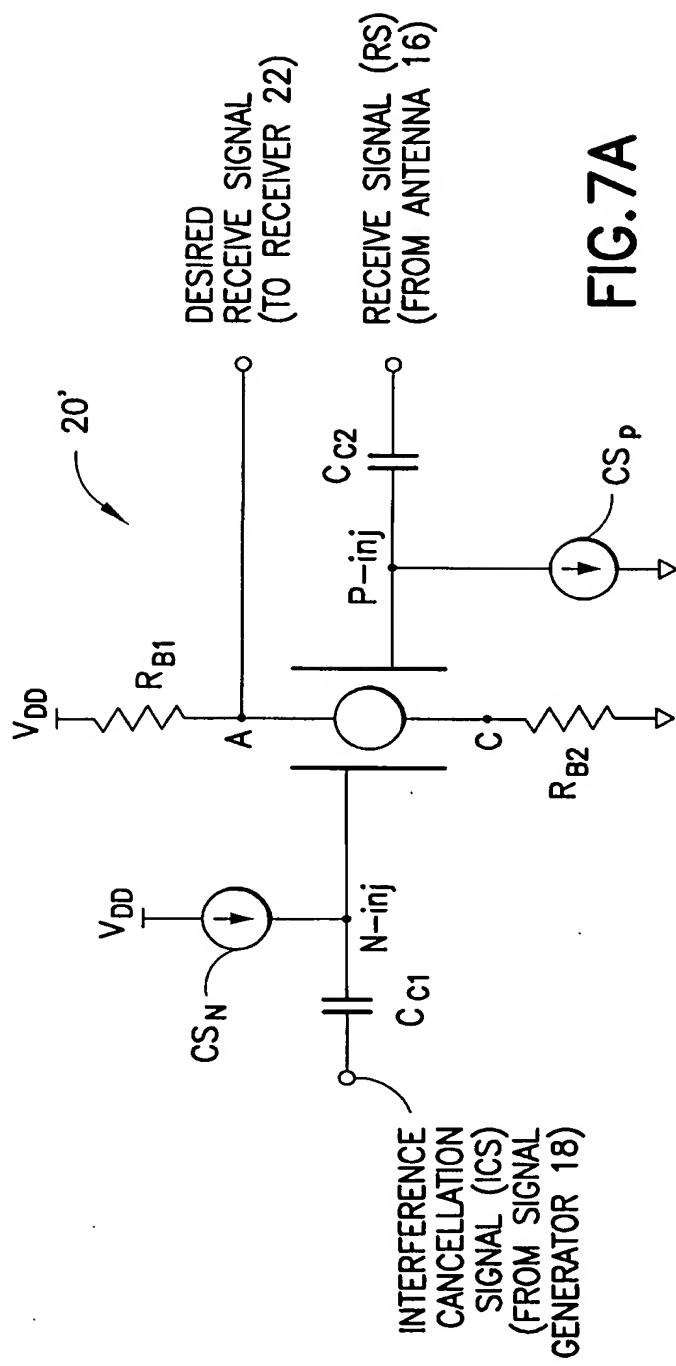


FIG. 7A

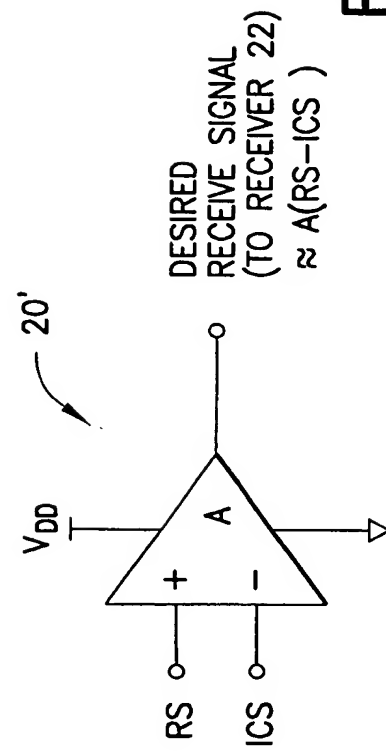


FIG. 7B